

REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested.

I. STATUS OF THE CLAIMS

Claim 16 is cancelled herein without prejudice or disclaimer.

None of the claims are amended herein.

In view of the above, it is respectfully submitted that claims 1-15 are currently pending and under consideration.

II. REJECTION OF CLAIMS 3, 6, 8, 12, 14 and 15 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

"The enablement requirement refers to the requirement of 35 U.S.C. 112, first paragraph that the specification describe how to make and how to use the invention. The invention that one skilled in the art must be enabled to make and use is that defined by the claim(s) of the particular application or patent.

The purpose of the requirement that the specification describe the invention in such terms that one skilled in the art can make and use the claimed invention is to ensure that the invention is communicated to the interested public in a meaningful way. The information contained in the disclosure of an application must be sufficient to inform those skilled in the relevant art how to both make and use the claimed invention." MPEP § 2164.

In item 3 on page 2 of the Office Action, the claims 3, 6, 8, 12, 14, and 15 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

However, support for claims 3, 6, 8, 12, 14, and 15 may be found, for example, in paragraphs 0035 through 0037 on pages 7 and 8 of the Applicant's specification. Here, the specification clearly teaches how the present invention utilizes various control factors to calculate performance indexes that are not utilized in the prior art methods of controlling a motor. A person of ordinary skill in the art can determine from the Applicant's specification that the present invention distinguishes from the prior art because the present invention utilizes such control factors that are not utilized in the prior art. "Detailed procedures for making and using the invention may not be necessary if the description of the invention itself is sufficient to permit those skilled in the art to make and use the invention." MPEP § 2164.

In view of the above, it is respectfully requested that the rejection is overcome.

III. REJECTION OF CLAIM 16 UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claim 16 is cancelled herein without prejudice or disclaimer.

In view of the above, it is respectfully submitted that the rejection is overcome.

IV. REJECTION OF CLAIMS 1, 4, AND 11 UNDER 35 U.S.C. § 102 (B) AS BEING CLEARLY ANTICIPATED BY SANNOMIYA AKIO (JP 62-077889)

The present invention as recited in claim 1, relates to “[a] method of controlling a motor in a motor driving system, the method comprising: calculating N control algorithms corresponding to N motor driving conditions; driving the motor under N motor driving environments by using one of the calculated algorithms; calculating performance indexes by using predetermined control factors which are detected when driving the motor using the algorithm under the N motor driving environments; and storing the calculated N control algorithms and the performance indexes corresponding to each of the N motor driving conditions.”

Akio teaches a motor controlling system. In contrast to the Examiner’s assertions, Akio fails to teach or suggest any of the claimed features recited in claim 1. For example, nothing in the Akio reference teaches or suggests the method of “calculating performance indexes by using predetermined control factors which are detected when driving the motor using the algorithm under the N motor driving environments.” The Examiner points to the various features in the Abstract of Akio, which are not the same as the features recited in claim 1 of the present invention.

Claim 4 recites a method of controlling a motor, comprising “driving the motor by applying the base controller; converting predetermined information detected by driving the motor into system performance information; comparing the system performance information with N system performance information of the respective N controllers; and driving the motor by selecting an optimum controller under the driving condition to correspond to the system performance information most similar to the detected predetermined information.” Akio does not teach the features recited in claim 4. For example, nothing in Akio teaches or suggests “comparing the system performance information with N system performance information of the respective N controllers.”

Claim 11 recites “[a] system for driving a motor, the system comprising: a controller calculation unit to obtain functions of control parameters considering N driving environments and

to calculate control algorithms according to the functions; and a memory to store the functions of the control parameters and the corresponding control algorithms." Akio does not teach the features recited in claim 11.

The Examiner is reminded, "to anticipate a claim, the references must teach every element of the claim." MPEP § 2131. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

In view of the above, it is respectfully submitted that the rejection is overcome.

V. REJECTION OF CLAIMS 13 and 16 UNDER 35 U.S.C. § 102 (B) AS BEING CLEARLY ANTICIPATED BY TAKAHASHI SEIJI (JP 09-047057)

Claim 16 is cancelled herein.

Claim 13 relates to "[a] system for driving a motor, comprising: a plurality of driving environments; and a plurality of controllers pre-designed based on the driving environments, wherein at least one controller of the plurality of controllers is selected to control a specific driving environment of the driving environments using control factors."

Seiji teaches a motor controller. However, Seiji does not teach or suggest the features recited in claim 13 of the present invention.

Again, the Examiner is reminded, "to anticipate a claim, the references must teach every element of the claim." MPEP § 2131. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

In view of the above, it is respectfully submitted that the rejection is overcome.

VI. REJECTION OF CLAIMS 2 AND 5 UNDER 35 U.S.C. § 103 (A) AS BEING UNPATENTABLE OVER SANNOMIYA AKIO (JP 62-077889) AS APPLIED TO CLAIMS 1 AND 4 ABOVE, AND FURTHER IN VIEW OF TAKAHASHI SEIJI (JP 09-047057)

Dependent claims 2 and 5 (depending, either directly or indirectly, from claims 1 and 4, respectively) recite patentably distinguishing features of their own, and further, are at least patentably distinguishing due to their dependencies from independent claims 1 and 4. For example, in contrast to Akio and Seiji, dependent claim 2 provides, "wherein the calculating of

the performance indexes comprises: assigning predetermined weights to each of the predetermined control factors; and calculating the performance indexes by combining the predetermined control factors to which the weights are assigned." Akio and Seiji, either alone or in combination, do not teach the features recited in claim 2. Instead, the Examiner relies on broad conclusory statements, subjective belief, and unknown authority in suggesting that the combination of Akio and Seiji teaches the features recited in claim 2.

In view of the above, it is respectfully submitted that the rejection is overcome.

VII. REJECTION OF CLAIMS 7 AND 9-10 UNDER 35 U.S.C. § 103 (A) AS BEING UNPATENTABLE OVER SANNOMIYA AKIO (JP 62-077889) IN VIEW OF TAKAHASHI SEIJI (JP 09-047057)

The present invention as recited in claim 7, relates to "[a] motor control method in a system driven by a motor, the method comprising: calculating N control algorithms corresponding to N motor driving conditions; driving the motor under N motor driving environments by using one of the calculated algorithms; calculating performance indexes by using predetermined control factors which are detected when driving the motor using the algorithm under the N motor driving environments; and storing the calculated N control algorithms and the performance indexes corresponding to each of the N motor driving conditions; driving the motor by applying the algorithm; calculating a real performance index by using control results which are detected when driving the motor; comparing the real performance index with the stored performance indexes, and selecting the stored performance index most similar to the real performance index; and driving the motor using the algorithm which corresponds to the selected stored performance index."

Akio and Seiji, either alone or in combination, do not teach the features recited in claim 7. Here again, the Examiner relies on broad conclusory statements, subjective belief, and unknown authority in suggesting that the combination of Akio and Seiji teaches the features recited in claim 7.

Dependent claims 9 and 10 (depending, either directly or indirectly, from claim 7) recite patentably distinguishing features of their own, and further, are at least patentably distinguishing due to their dependencies from independent claim 7.

In view of the above, it is respectfully submitted that the rejection is overcome.

VIII. CONCLUSION


In view of the foregoing amendments and remarks, it is respectfully submitted that each of the claims patentably distinguishes over the prior art, and therefore defines allowable subject matter. A prompt and favorable reconsideration of the rejection along with an indication of allowability of all pending claims are therefore respectfully requested.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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